Mestek, Inc.

Georgia Manufacturing Extension Partnership

Mestek Gets Lean In Only Three Days

Client Profile:
Mestek has 29 divisions across the United States and Canada. For 30 years, the 110 employees at the plant in Wrens, Georgia have produced seven product lines that are shipped to domestic and international contractors, wholesalers, distribution centers, and equipment manufacturers. Mestek's products include parts for kickpace heaters by Beacon Morris; central high-velocity air-conditioning systems by SpacePak; and dampers and access doors by ABI/AWV and Cesco Products.

Situation:
Mestek had heard about the benefits of implementing lean manufacturing concepts, but needed help designing and implementing its own initiative. The company contacted the Georgia Manufacturing Extension Partnership (Georgia MEP), a NIST MEP network affiliate, for assistance.

Solution:
Georgia MEP worked with Mestek to focus its drive toward lean implementation by suggesting a pilot implementation on one line. Together, they decided to test lean on the company's BD-20 shutter line. Mestek formed a lean implementation team to work with Georgia MEP lean coaches.
To begin, both coaches and team collected data on current processes and brainstormed and prioritized ideas for improvement, setting goals for what the company hoped to achieve. Then, they conceptualized and designed a layout on paper according to these goals. The team presented the layout and goals to their managers, who cheered them onward, providing both moral and resource support. After the team finalized its ideas and devised a plan of action, it spent the third day of the implementation working with Georgia MEP to physically apply changes while monitoring and adjusting them as needed.
The Mestek team moved the packing area closer to where the product comes off the assembly line, effectively reducing lead times and increasing floor space and productivity. With less travel time between equipment and areas and less space for parts to gather, the team reduced material handling, travel time, and work-in-process. Visual controls, such as shadowing or outlining where tools and carts should be kept in work areas, increased organization, reduced clutter and time spent searching for the misplaced equipment, and safely kept these items out of aisles.
Implementing continuous flow techniques reduced batch sizes and inventory

levels. For instance, the team previously processed large batches of blades and stored them on the conveyors and on the surrounding floor. Now, the team processes only enough blades for two days of orders, decreasing the work-in-process on the floor and in related storage space.

Results:
Freed 26 percent of floor space in the BD-20 shutter department.
Reduced lead times by 60 percent.
Reduced raw material inventory by 25 percent or more daily.
Reduced work-in-process inventory by 60 percent.
Created a safer workplace environment by removing obstructions from work space.

Testimonial:
"[The Georgia Manufacturing Extension Partnership's] classes help you to see what lean is trying to do and the exercises show you how effective lean can be and that anything, any piece of machinery for instance, is possible to move. The lean training opened our eyes to many possibilities."

Will Shockey, Plant Mechanical Engineer/Industrial Engineer